Appln. No.: 10/617,625 PATENT

Amend/Response filed August 13, 2008 replying to Office Action of Mar. 28, 2008

Attorney Docket No. 352000-902002 Customer No. 26379

<u>REMARKS</u>

This Supplemental Amendment is submitted in response to the Notice of Non-compliant amendment of July 29, 2008. Claims 1-16 and 23 were cancelled in the Preliminary Amendment filed July 10, 2003, but improperly shown as withdrawn in the amendment filed June 30, 2008. The listing of claims has been corrected to show that claims 1-16 and 23 are cancelled. The remainder of this Supplemental Amendment

reflects the amendment filed June 30, 2008. Entry of this Supplemental Amendment is

respectfully requested.

In reply to the final Office action mailed March 28, 2008, Applicant respectfully proposes entry of the clarifying amendments set forth above and consideration the following remarks. By this response, amendments to claims 17-22 and 28-41 are proposed, and no new matter is added. After courteous entry of this paper, claims 17-

22 and 28-41 will remain subject to examination in this application.

In the Office Action, the Examiner rejected claims 17-22 and 28-41 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,214,507 to Aravind *et al.* Applicant respectfully traverses, submitting that the amended claims are clarified and distinguishable from the cited reference for at least the reasons below. Reconsideration is respectfully requested.

Claim Rejections Under 35 U.S.C. §103

Claims 17-22 and 28-41 stand rejected under 35 U.S.C. §103(a) as being

unpatentable over Aravind.

Without acquiescence, in the interests, e.g., of advancing prosecution and avoiding additional costs, Applicant proposes amendment to independent claims 17 and 36 to more clearly distinguish Applicant's innovations from the cited art. Amended claim 17, for example, now recites "a quantizing component that compresses said respective

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transform coefficients representing said plurality of data groups in response to a unique estimate for a number of coding bits" and "a rate control component that maps each of a plurality of unique pairs of data, pairs of data being characterized as a first component of particular class data paired with a second component of particular quantization parameter data, to the unique estimate for a number of coding bits in response to the compressed quantized transform coefficients, wherein a value representing an actual quantity of coding bits observed for previously coded data entities is factored into the estimation process," as described in the specification.

As understood, Aravind does not disclose a compressing component as recited in claim 17. The Office Action does not cite where Aravind discloses a component as recited in claim 17. On page 2, numbered paragraph 2 of the Office Action, a reference is made to the MPEG standard. However, the Office Action is silent on how to combine Aravind and the MPEG standard. Applicant submits that the Office has failed to establish a prima facie case for a proper Section 103(a) rejection.

Aravind discloses a quantizer 120 that generates a DCTERRQ signal (quantized version of the transformed error signal DCTERR) in response to the DCTERR signal from the DCT 110 and a q_p signal (quantization parameter) from a PNS categorizer 105. (see Figure 1; column 4, lines 3-21). The quantizer 120 of Aravind is not "a quantizing component that compresses said respective transform coefficients representing said plurality of data groups in response to a unique estimate for a number of coding bits" as recited in amended claim 17.

Further, the PNS categorizer 105 of Aravind is not the rate control component recited in amended claim 17. As noted, Aravind is silent on compression. The PNS categorizer 105 of Aravind does not map in response to compressed quantized transform coefficients as recited in amended claim 17.

Therefore, Applicant respectfully submits that clarified (amended) independent claim 17 is allowable for at least the above reasons. Further, claim 36 has been amended consistent with the clarifications to claim 17, and Applicant submits that

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amended claim 36 is also allowable for at least the above reasons. Additionally, because claims 18-22 and 28-35 depend on independent claim 17, and claims 37-41 depend on independent claim 36, Applicant respectfully submits that these dependent claims are also allowable for at least these reasons. Accordingly, upon courteous entry of this paper, Applicant respectfully requests withdrawal of the rejections under §103(a)

and allowance of claims 17-22 and 28-41.

Claims 17-19, 21, 28-30, 33-34, 36-38, and 40 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Okada. Additionally, claims 20, 22, 31-32, 35, 39, and 41 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Okada in view of Cornog. Applicant traverses, respectfully calling attention to the appropriate characterization of data pairs clarified herein, and submits that the amended claims distinguish the claimed invention from the cited art and obviate these rejections.

In contrast to claim 17, Okada is directed towards rate control where the quantization itself is controlled by the coding controller (See Fig. 2 and column 3, lines 64-67), not a rate control method that maps each of a plurality of unique pairs of data (of the disparate classes of paired data components, as now clarified) to a unique estimate for the number of coding bits. Further, amended claim 17 recites factoring "a value representing an actual quantity of coding bits observed for previously coded data entities" into the estimation process. The rate control of Okada, however, utilizes a general quantization parameter and coding bit information observed for all the previously coded data entities, as opposed to coding bit usage (e.g., actual quantities of coding bits observed for previously coded data entities, or groups of blocks) and mapping (e.g., to a certain class and quantized with a particular parameter) features consistent with amended claim 17. As such, Okada does not teach or suggest at least "a rate control component that maps each of a plurality of unique pairs of data, pairs of data being characterized as a first component of particular class data paired with a second component of particular quantization parameter data, to the unique estimate for a number of coding bits in response to the compressed quantized transform coefficients, wherein a value representing an actual quantity of coding bits observed for

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previously coded data entities is factored into the estimation process," as recited in amended claim 17. The block 14 of Figure 2 of Okada is a specific area extracting section that extracts from the frame memory section 1. The block 2 subtracts the output from the motion compensation prediction section 12 from the output of the frame memory section. Neither block 14 or 2 of Okada is the partitioning component recited in claim 17. The orthogonal transformer 3 of Okada transforms the output of block 2. This is not the transform component that encodes respective ones of said plurality of data groups recited in claim 17. Nor as these features disclosed or suggested in Cornog, which has been cited for a run-length coder and a uniform scalar quantizer against various dependent claims.

Therefore, Applicant respectfully submits that clarified (amended) independent claim 17 is allowable for at least the above reasons. Further, claim 36 has been amended consistent with the clarifications to claim 17, and Applicant submits that amended claim 36 is also allowable for at least the above reasons. Additionally, because claims 18-22 and 28-35 depend on independent claim 17, and claims 37-41 depend on independent claim 36, Applicant respectfully submits that these dependent claims are also allowable for at least these reasons. Accordingly, upon courteous entry of this paper, Applicant respectfully requests withdrawal of the rejections under §103(a) and allowance of claims 17-22 and 28-41.

Therefore, Applicant respectfully submits that claims 17-22 and 28-41 are allowable for at least the above reasons. Upon courteous entry of this paper, Applicant respectfully requests withdrawal of the rejections under §103(a) and allowance of claims 17-22 and 28-41.

Conclusory Remarks

In view of the above, it is respectfully submitted that claims 17-22 and 28-41 are now in condition for formal allowance, and early and favorable action to that effect is respectfully requested. Upon such courteous consideration of the claims subject to

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examination, Applicant solicits cancellation of the withdrawn claims, without prejudice or disclaimer, via Examiner Amendment in accordance with MPEP § 821.02.

The Examiner is invited to call Applicant's attorney at the number below if doing so will in any way advance the prosecution of this application.

The Commissioner is hereby authorized to charge any fees which may be required, or credit in the overpayment, to Deposit Account No. **07-1896** referencing Attorney Docket No. **352000-902002**.

Respectfully submitted,

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Dated: August 13, 2008 By: <u>/Edward B. Weller/</u> Edward B. Weller

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